CLAIMS:

What we claim as our invention are as follows:

1. A method uses the "row/column buffer switches" that lets LCD to scan either vertically or horizontally. That a rectangle LCD can accept either a landscape or a portrait image without a pre-rotate process.

2. According to claim 1, a method to solve the unequal column and row number issue.

    1) Using the Extra Scan Lines Scheme.

    2) Using the Extra Column Buffer Scheme.

3. According to claim 1 and 2, a method to solve the TFT LCD electrode direction issue.

    1) Using Common Source Circuit.

    2) Using Common Drain Circuit.